

CLAIMS

We claim:

1. An apparatus including:

a cash dispensing automated banking machine,

5 wherein the machine includes a housing,

wherein the machine includes a monitor,

wherein the machine includes a swing arm assembly,

wherein the assembly operatively supports the monitor,

wherein the assembly includes a swing arm,

10 wherein the assembly includes a housing bracket,

wherein the housing bracket is mounted to the housing,

wherein the swing arm is pivotally connected to the
housing bracket,

wherein the assembly includes a monitor bracket,

wherein the monitor bracket is mounted to the monitor,

5 wherein the monitor bracket is pivotally connected to the
swing arm.

2. The apparatus according to claim 1 wherein the monitor is pivotable about at least three
independent axes, and wherein at least two of the axes are substantially perpendicular.

3. The apparatus according to claim 1 wherein the swing arm is pivotally connected to the
10 housing bracket about a vertical axis.

4. The apparatus according to claim 3 wherein at least one pivot pin connects the swing arm
to the housing bracket, wherein each pivot pin axis coincides with the vertical axis,
wherein the swing arm is rotatable about the vertical axis.

5. The apparatus according to claim 3 wherein the swing arm is operative to rotate approximately 90 degrees about the vertical axis.
6. The apparatus according to claim 1 wherein the monitor bracket is pivotally connected to the swing arm about a vertical axis.
- 5 7. The apparatus according to claim 6 wherein at least one pivot pin connects the swing arm to the monitor bracket, wherein each pivot pin axis coincides with the vertical axis, wherein the monitor bracket is rotatable about the vertical axis.
8. The apparatus according to claim 6 wherein the monitor bracket is operative to rotate approximately 180 degrees about the vertical axis.
- 10 9. The apparatus according to claim 1 wherein the monitor is pivotable about a horizontal axis relative to the swing arm.
10. The apparatus according to claim 1,

wherein the monitor bracket is removably fastened to the monitor, wherein the monitor is operative to move responsive to movement of the monitor bracket,

wherein the housing bracket is removably fastened to an interior surface of the housing, wherein the housing bracket is inoperative to move relative to the housing responsive to movement of the swing arm.

11. The apparatus according to claim 10 wherein the housing includes a vertical strut,
5 wherein the housing bracket is attached to the vertical strut.

12. The apparatus according to claim 1 wherein the housing comprises an enclosure, wherein the enclosure includes an opening and a door, wherein the door is movable between an open position and a closed position, wherein the opening is closed when the door is in the closed position, wherein when the door is in the open position the swing arm is operative
10 to be moved to enable the monitor to swing through the opening to a location outside the enclosure.

13. The apparatus according to claim 12 wherein the monitor includes a display screen, wherein the door includes a window, wherein the monitor is operative to be positioned inside the enclosure so that when the door is in the closed position at least a portion of the
15 display screen is visible through the window.

14. The apparatus according to claim 13 wherein the door comprises a service door, and wherein the monitor comprises a service monitor.

15. The apparatus according to claim 9 wherein the monitor bracket comprises a first bracket portion pivotably connected to a second bracket portion about the horizontal axis, wherein the first bracket portion is fastened to the monitor, and wherein the second bracket portion is pivotably connected to the swing arm about a vertical axis.
- 5 16. The apparatus according to claim 1 wherein the assembly includes at least one spring plunger, wherein each spring plunger is movable between a locking position and an unlocking position, wherein the at least one spring plunger in a locking position is operative to lock the swing arm in a pivoting position relative to at least one of the housing bracket and the monitor bracket.
- 10 17. The apparatus according to claim 1 wherein the machine includes a keyboard, wherein the assembly includes a keyboard bracket, wherein the keyboard bracket operatively supports the keyboard, wherein the keyboard bracket is pivotally connected to the monitor bracket about a horizontal axis, wherein rotation of the keyboard bracket about the horizontal axis is operative to cause a change in keyboard orientation.
- 15 18. The apparatus according to claim 1 wherein the cash dispensing automated banking machine comprises an ATM, wherein the ATM includes a currency dispenser and currency notes, wherein the currency dispenser is operative to dispense the currency notes from the ATM.

19. A method of operating the apparatus recited in claim 12, comprising:

- (a) opening the door;
- (b) pivoting the swing arm relative to the housing bracket, wherein at least a portion of the monitor extends through the opening;
- 5 (c) pivoting the monitor bracket relative to the swing arm;
- (d) pivoting the swing arm relative to the housing bracket, wherein the monitor is positioned inside the enclosure;
- (e) closing the door.

20. An apparatus including:

- 10 a cash dispensing automated banking machine,
- wherein the machine includes a housing,
- wherein the machine includes a service monitor,

wherein the monitor includes a display screen,

wherein the machine includes a swing arm assembly,

wherein the assembly operatively supports the monitor,

wherein the assembly includes a swing arm,

5 wherein the assembly includes a housing bracket,

wherein the housing bracket is mounted to an interior
surface of the housing,

wherein the swing arm is pivotally connected to the
housing bracket about a vertical axis,

10 wherein at least one pivot pin connects the swing
arm to the housing bracket,

wherein the assembly includes a monitor bracket,

wherein the monitor bracket is mounted to the monitor,

wherein the monitor bracket is pivotally connected to the
swing arm about a vertical axis,

wherein at least one pivot pin connects the monitor
bracket to the swing arm,

wherein the monitor is pivotable about a horizontal axis relative to
the swing arm,

wherein the housing comprises an enclosure,

wherein the enclosure includes an opening and a service
door,

wherein the door includes a window,

wherein the door is movable between an open
position and a closed position,

wherein the opening is closed when the door
is in the closed position,

wherein when the door is in the open
position the swing arm is operative to be
moved to enable the monitor to swing
through the opening to a location outside the
enclosure,

wherein the monitor is operative to be
positioned inside the enclosure so that when
the door is in the closed position at least a
portion of the display screen is visible
through the window.